



## Daily Derivatives Report

## Nifty Futures

	Value	Change
Most recent settlement	24,685	0.1% ▼
Open Interest (OI)	1,82,21,175	0.4% ▼
Change in OI (abs)	1,82,21,175	78,900 ▼
Premium / Discount (Abs)	53	39 ▼
<b>Inference</b>	<b>Long Unwinding</b>	

## Bank Nifty Futures

	Value	Change
Most recent settlement	55,504	0.1% ▲
Open interest (OI)	31,15,595	2.1% ▼
Change in OI (abs)	31,15,595	68,250 ▼
Premium / Discount (Abs)	162	90 ▼
<b>Inference</b>	<b>Short Covering</b>	

## Volatility Insights

	Value	Change
India VIX Index	12.36	0.22 ▲
Nifty ATM IV (%)	10.48	0.2 ▲
Bank Nifty ATM IV (%)	11.21	0.0 ▼
PCR (Nifty)	1.01	0.07 ▼
PCR (Bank Nifty)	0.76	0.01 ▲

The FII Long Ratio in Index Futures **drop** to 8.3 %, **down** from 8.7 % in the previous session.

## Single Stock Futures Movers

Long Buildup (Open Interest Higher + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
NUVAMA	1,84,050	13.7%	6972	0.2%
MANKIND	18,30,600	7.8%	2478.8	0.1%
DRREDDY	1,26,60,000	7.0%	1253.8	0.5%
MUTHOOTFIN	39,91,900	6.9%	2766.6	9.7%
BLUESTARCO	16,10,700	5.6%	1785.6	1.8%

Short Buildup (Open Interest Higher + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
INOXWIND	4,30,23,528	11.1%	137.29	-0.7%
OIL	1,20,52,600	8.9%	399.75	-1.5%
RVNL	1,83,37,000	6.3%	320.95	-1.0%
NATIONALUM	6,88,38,750	6.1%	187.82	-1.5%
PIIND	20,76,900	6.1%	3693.5	-2.5%

Short Covering (Open Interest Lower + Price Higher)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
KFINTECH	22,45,500	-6.3%	1121.8	1.1%
KAYNES	7,77,700	-4.1%	6131	0.7%
ABFRL	4,40,15,400	-3.8%	75.13	0.4%
INDHOTEL	2,61,20,000	-3.6%	774.1	0.2%
AUBANK	2,21,25,000	-3.4%	748.8	1.1%

Long Unwinding (Open Interest Lower + Price Lower)				
Symbol	Open Interest	Chg (%)	Price	Chg (%)
FORTIS	1,02,64,100	-5.0%	932.9	-1.7%
CESC	1,10,52,625	-2.8%	163.58	-0.9%
BIOCON	4,34,70,000	-2.8%	360.05	-0.4%
IEX	4,63,31,250	-2.6%	140.65	-0.6%
BHARATFORG	1,15,40,000	-2.3%	1184.1	-0.1%

For an explanation of all the contents in this report, kindly click on the hyperlink at the top right which will take you to the end-of-report appendix

## Open Interest Trends by Participant

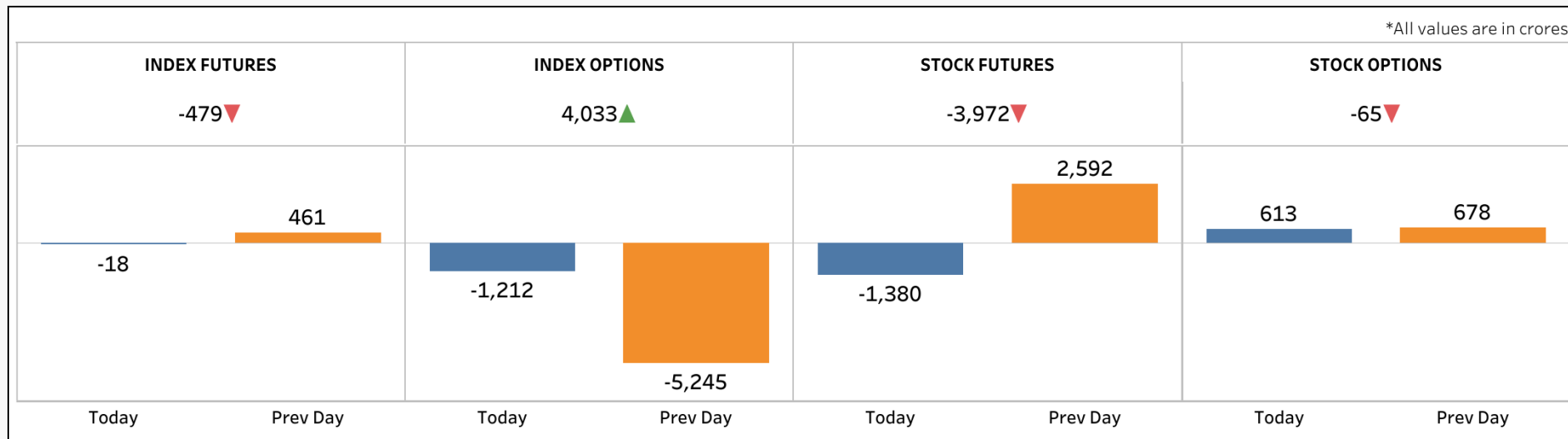
▲ and ▼ indicate positive and negative absolute changes, respectively

FII				DII			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
-15,700 ▼	-2,623 ▼	126,743 ▲	-54,036 ▼	3,800 ▲	-1,473 ▼	13,470 ▲	46,557 ▲
19,716		65,220	32,015	4,800		12,015	10,478
	2,501				-2,540	-1,455	
	-122		-22,021				-36,079
		-61,523					
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
-32,029	-182,879	255,844	1,313,164	5,870	34,935	45,454	-4,014,313
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

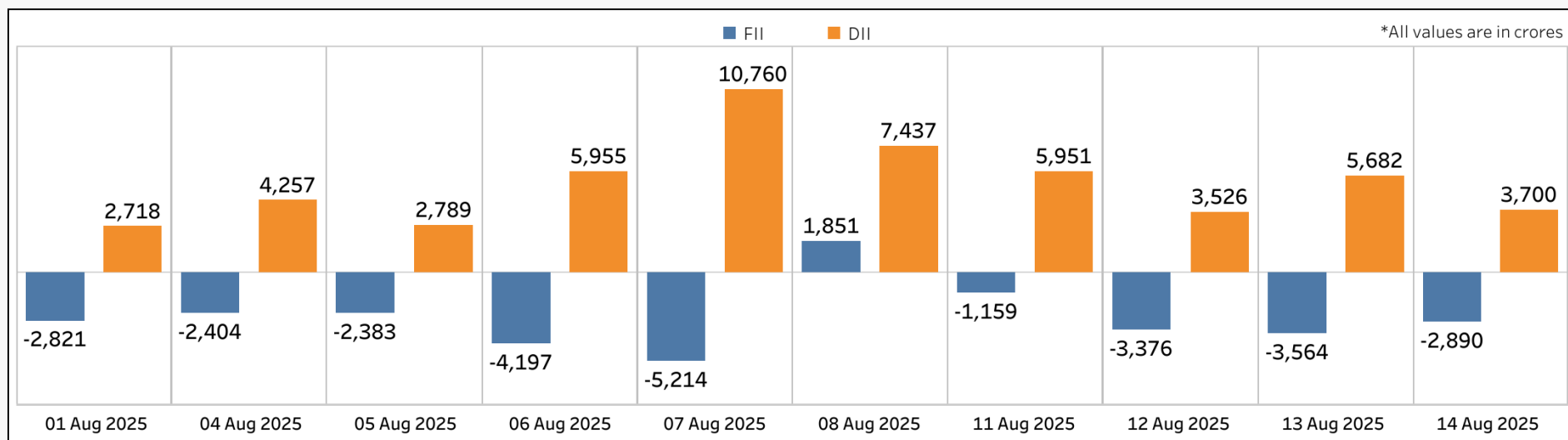
  

Clients				Pro			
INDEX CALL	INDEX FUT	INDEX PUT	STK FUT	INDEX CALL	INDEX FUT	INDEX PUT	STK FUT
165,759 ▲	-939 ▼	-138,771 ▼	5,308 ▲	-153,859 ▼	5,035 ▲	-1,442 ▼	2,171 ▲
121,362		113,974		7,981	4,710		5,549
	-2,048	-1,109	5,994		-325	-52,438	3,378
		-24,797	686			-50,996	
				-145,878			
Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S	Net O/S
171,392	124,131	-390,725	2,240,920	-145,233	23,813	89,428	460,229
Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day	Today Prev Day

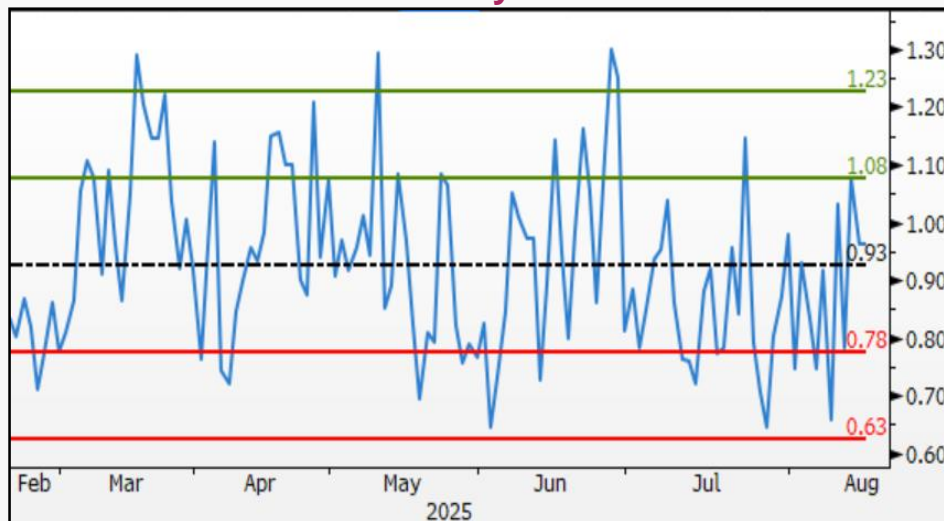
## Daily Net Open Interest Change



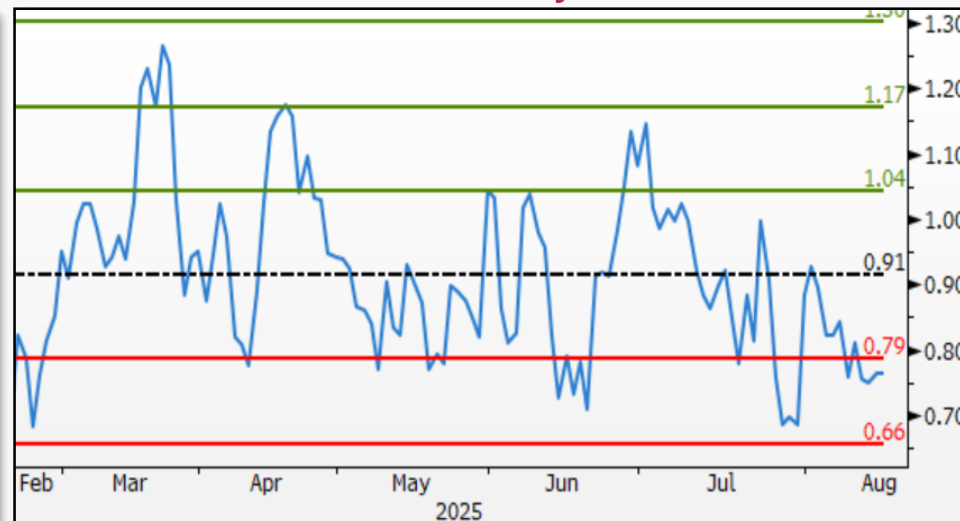
## DII and FII Daily Cash Market Flows



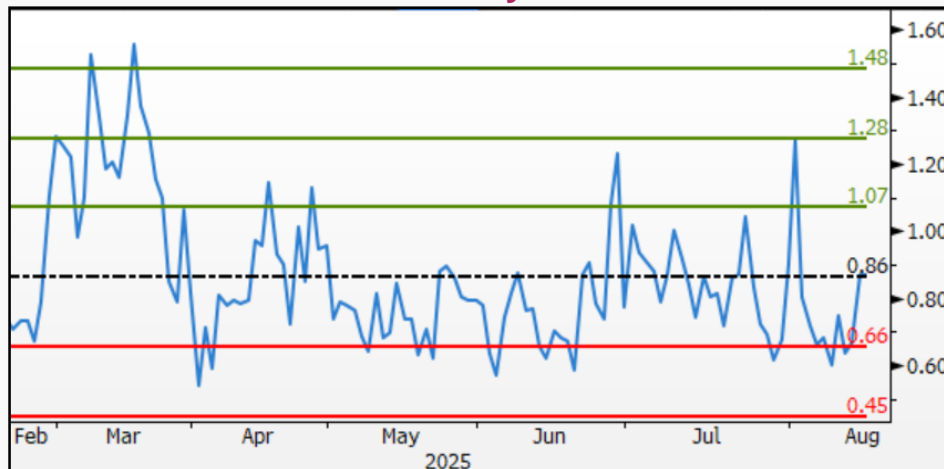
## Nifty



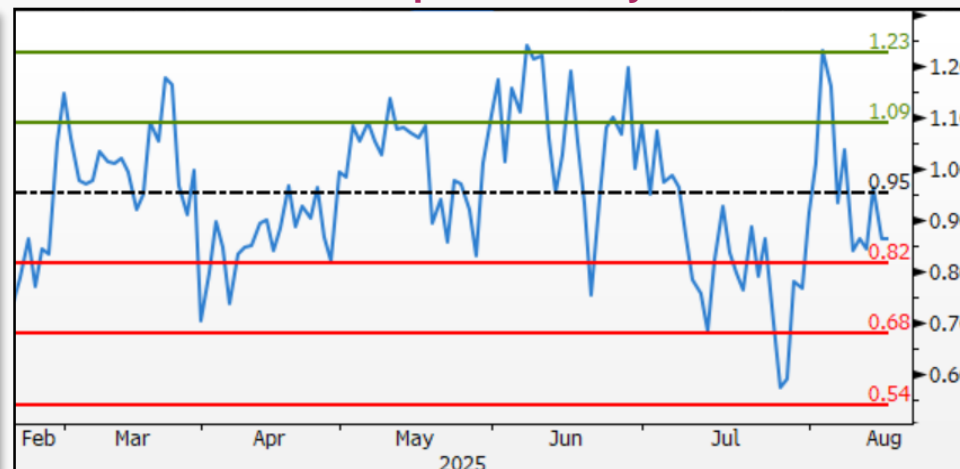
## Bank Nifty



## Fin Nifty

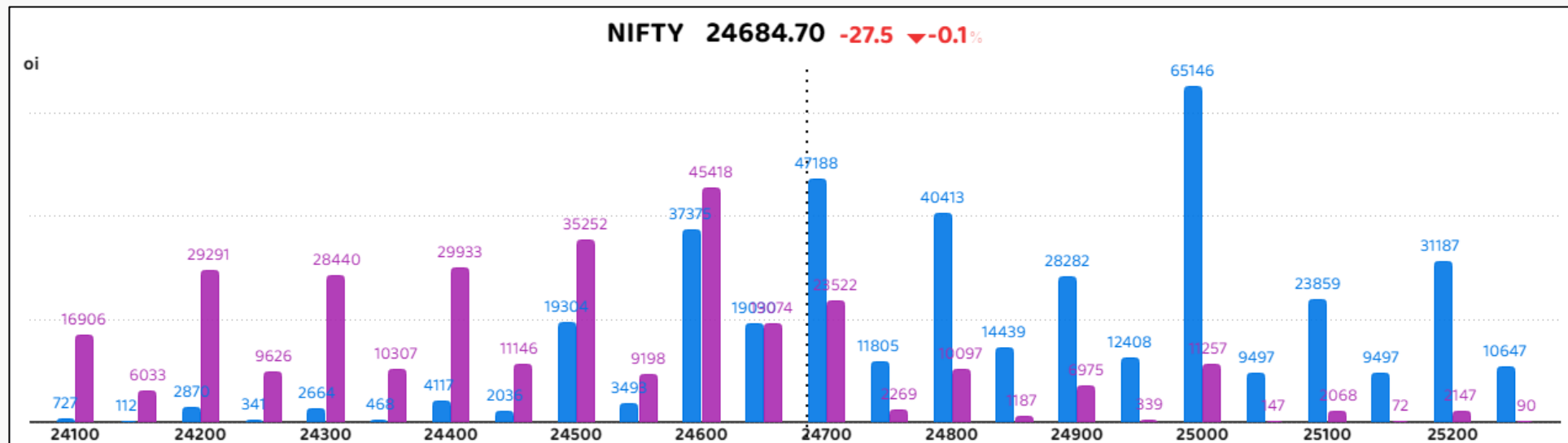


## Midcap Select Nifty



## Positioning Stack by Strike (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call  Put 



For the Nifty, the 25,000 Call and the 24,600 Put had the highest call and put concentration (contracts). For the Bank Nifty, the 56,000 Call and the 55,000 Put saw the most amount of open interest.

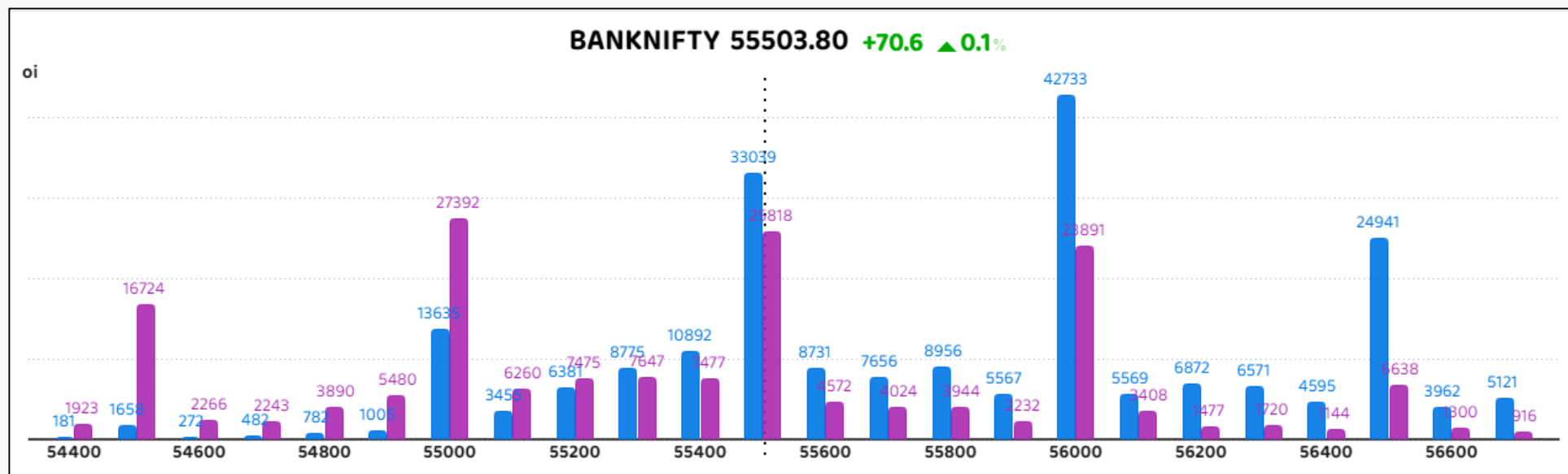
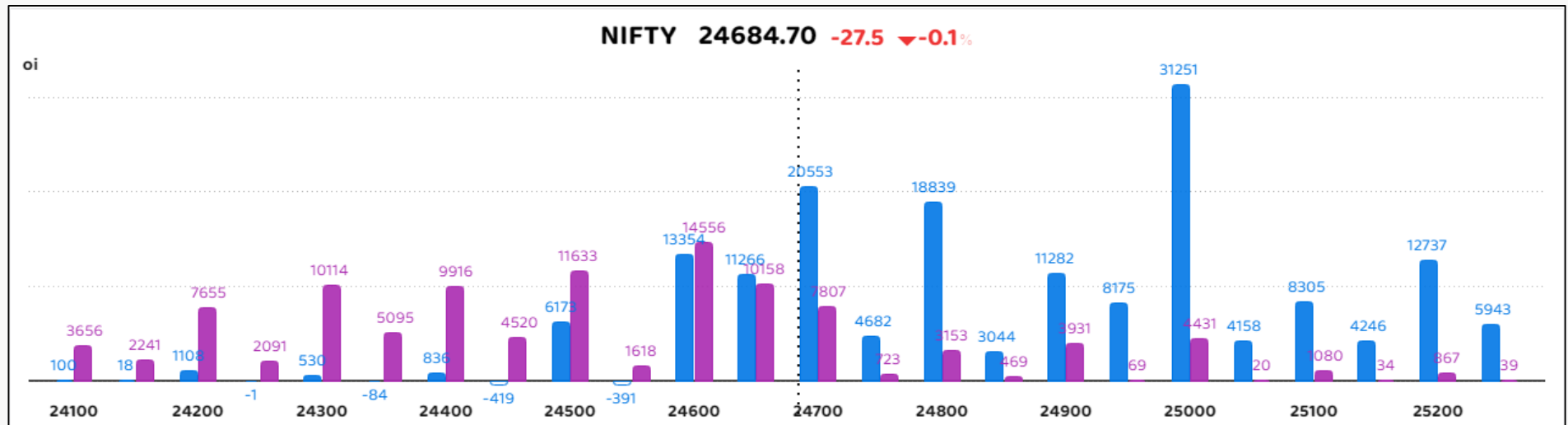


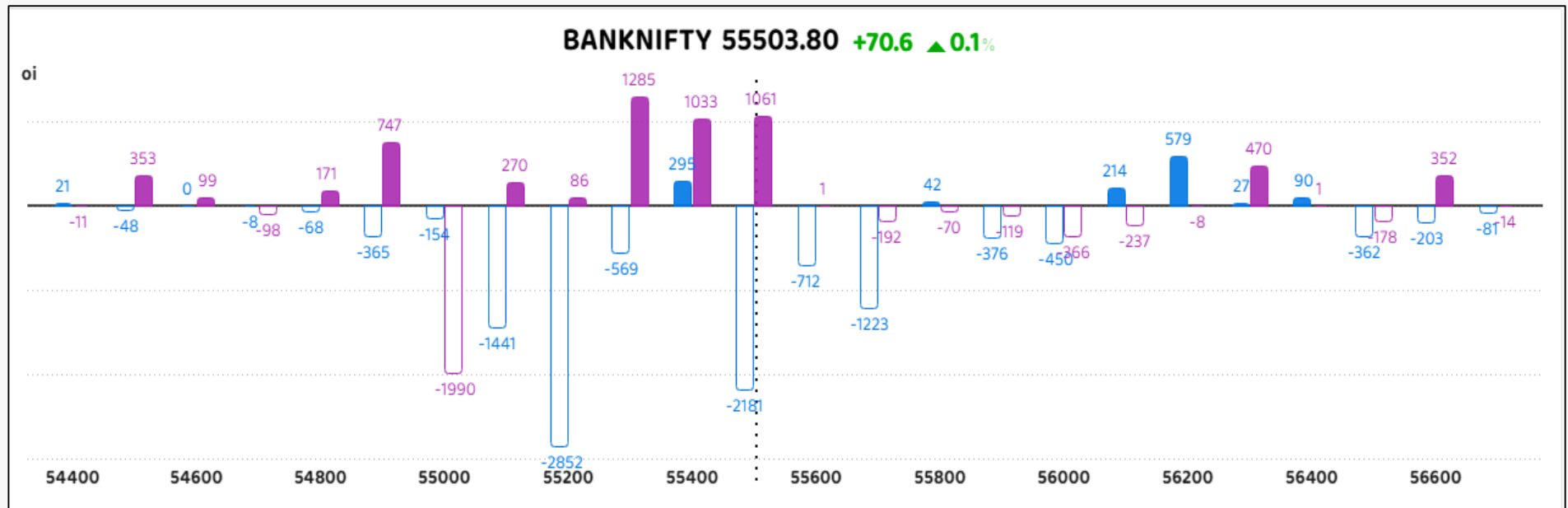
Chart quotes show front-month Nifty and Bank Nifty futures levels along with absolute and percentage change from prior trading session

## Open Interest Change (Nifty Current Week Expiry & BankNifty Monthly Expiry)

Call ■ Put ■



The largest open interest changes (contracts) were seen at the 25,000 Call and the 24,600 Put



For the Bank Nifty, the biggest open interest changes were seen at the 55,500 Call & the 55,300 Put

## Stocks with High IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
BOSCH LTD	38585	-0.2	27.5	36.2	2.1	74.4
RBL BANK LTD	251.85	-0.8	59.2	76.5	10.6	73.6
TORRENT PHARMA	3623	0.1	27.1	34.6	8.3	71.3
SHREE CEMENT	30400	0.0	23.7	31.9	7.9	65.7
KFIN TECHNOLOGIES	1128.9	1.3	41.6	44.8	36.1	63.1

## Stocks with Low IVR:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVR (1m/1y)
HINDUSTAN ZINC	426.65	-0.8	22.7	54.2	22.7	0.0
HDFC LIFE	788.75	1.6	18.2	80.6	18.2	0.0
BANK OF BARODA	242.77	0.4	22.6	66.9	22.6	0.0
INDIAN HOTELS	774.35	0.6	21.8	46.4	21.8	0.0
UNION BANK INDIA	134.84	-0.6	25.6	52.4	25.6	0.0



## Stocks With High IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
RBL BANK LTD	251.85	-0.8	59.2	76.5	10.6	94.3
OBEROI REALTY	1619.2	-0.5	38.7	50.6	21.6	88.0
PG ELECTROPLAST	489.65	0.7	49.6	63.7	35.6	84.8
GLENMARK PHARMA	2044.6	0.8	35.4	47.4	15.9	77.8
KFIN TECHNOLOGIES	1128.9	1.3	41.6	44.8	36.1	75.1

## Stocks With Low IVP:

Ticker	Last Px	Chg (%)	30d IV	30d IV High	30d IV Low	IVP (1m/1y)
HINDUSTAN ZINC	426.65	-0.8	22.7	54.2	22.7	0.0
HDFC LIFE	788.75	1.6	18.2	80.6	18.2	0.0
BANK OF BARODA	242.77	0.4	22.6	66.9	22.6	0.0
INDIAN HOTELS	774.35	0.6	21.8	46.4	21.8	0.0
UNION BANK INDIA	134.84	-0.6	25.6	52.4	25.6	0.0

## Stocks With High Call Volume To Put Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Call to Put Vol
SUZLON ENERGY	60.06	-0.5	13425	2636	5.1
UNO MINDA LTD	1149.8	3.2	17257	3389	5.1
MANKIND PHARMA	2472.6	0.3	30697	6749	4.6
IRB INFRASTRUCTURE	45.37	1.3	5578	1357	4.1
TATA ELXSI LTD	5681.5	0.2	6167	1501	4.1

## Stocks With High Put Volume To Call Volume

Ticker	Last Px	Chg (%)	Total Call Vol	Total Put Vol	Put to Call Vol
PHOENIX MILLS	1436.9	-0.5	1117	1705	1.5
PB FINTECH LTD	1852	-1.0	2069	2448	1.2
HINDALCO INDS	700.5	-0.7	21763	21190	1.0
MCX INDIA LTD	8339	-2.3	36358	34774	1.0
MAX HEALTHCARE	1267.1	-3.7	27248	25900	1.0

## Call Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Call OI	Highest Call OI	Relative to Highest Call OI
MAX HEALTHCARE	1267.1	-3.7	8069	8069	100.0
AMBER ENTERPRISES	6945.5	-0.7	10859	10859	100.0
NUVAMA WEALTH	6930	0.4	4631	4631	100.0
KAYNES TECHNOLOGY	6060	0.9	10512	11157	94.2
APOLLO HOSPITALS	7808.5	0.2	19034	22372	85.1

## Put Open Interest Relative to Record High

Ticker	Last Px	Chg (%)	Total Put OI	Highest Put OI	Relative to Highest Put OI
AMBER ENTERPRISES	6895	-0.7	4616	4616	100.0
NUVAMA WEALTH	6959	0.4	1893	1893	100.0
KAYNES TECHNOLOGY	6116.5	0.9	6453	6463	99.9
UNO MINDA LTD	1149.8	3.2	1764	1865	94.6
BHARAT DYNAMICS	1577.8	-0.8	6610	7218	91.6

## Call Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Call Vol	Highest CV	Relative to Highest CV
MUTHOOT FINANCE	2757.4	9.9	192028	192028	100.0
NUVAMA WEALTH	6959	0.4	23241	23241	100.0
UNO MINDA LTD	1149.8	3.2	17257	19814	87.1

## Put Volume Relative to Record High

Ticker	Last Px	Chg (%)	Total Put Vol	Highest PV	Relative to Highest PV
MAX HEALTHCARE	1220.7	-3.7	25900	25900	100.0
MUTHOOT FINANCE	2757.4	9.9	94729	94729	100.0
NUVAMA WEALTH	6959	0.4	11500	11500	100.0

### Call Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Call OI	Avg OI Call 20D	20D Call OI Ratio
NUVAMA WEALTH	6959	0.4	4631	1641	2.8
PG ELECTROPLAST	489.65	0.7	15815	6281	2.5
AMBER ENTERPRISES	6895	-0.7	10859	4660	2.3
MUTHOOT FINANCE	2757.4	9.9	19713	8532	2.3
KALYAN JEWELLERS	533.5	3.5	17778	8033	2.2

### Put Open Interest to 20-day Average

Ticker	Last Px	Chg (%)	Total Put OI	Avg OI Put 20D	20D Put OI Ratio
MUTHOOT FINANCE	2757.4	9.9	14408	3919	3.7
APOLLO HOSPITALS	7821.5	0.2	18807	6821	2.8
ALKEM LABORATORIES	5347.5	-0.8	4287	1732	2.5
PG ELECTROPLAST	489.65	0.7	6587	2864	2.3
SUZLON ENERGY	60.06	-0.5	4635	2406	1.9

### Call Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Call Vol	Avg Vol Cal 20D	20D Call Vol Ratio
MUTHOOT FINANCE	2757.4	9.9	192028	16416	11.7
NUVAMA WEALTH	6959	0.4	23241	2441	9.5
JUBILANT FOODWORKS	631.85	-1.2	44434	5570	8.0
ASHOK LEYLAND	121.96	1.9	39268	5944	6.6
MANAPPURAM FINANCE	266	3.9	42954	8014	5.4

### Put Volume Relative to 20-day Average

Ticker	Last Px	Chg (%)	Total Put Vol	Avg Vol Put 20D	20D Put Vol Ratio
MUTHOOT FINANCE	2757.4	9.9	94729	8354	11.3
JUBILANT FOODWORKS	631.85	-1.2	20966	2659	7.9
MAX HEALTHCARE	1220.7	-3.7	25900	4168	6.2
ASHOK LEYLAND	121.96	1.9	13339	3205	4.2
MANAPPURAM FINANCE	266	3.9	18188	4821	3.8

## Nifty 50 Constituents Open Interest (OI) Dashboard – Support / Resistance

Distance of Strike With Highest Open Interest From Current Market Price (%)

Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away	Stock Name	CE STRIKE	CE OI	%Away	CMP	PE Strike	PE OI	%Away
ADANIENT	2600	1717800	14.0%	2282	2700	1306200	18.3%	ITC	420	15123200	2.1%	411	410	4374400	-0.4%
ADANIPTS	1400	2049150	7.7%	1300	1400	1235950	7.7%	JIOFIN	350	10269500	6.9%	327	310	5029000	-5.3%
APOLLOHOSP	8000	254875	2.3%	7822	7600	297875	-2.8%	JSWSTEEL	1060	1142100	1.4%	1046	920	558225	-12.0%
ASIANPAINT	2600	794750	2.8%	2529	2400	571000	-5.1%	KOTAKBANK	2000	1250400	1.1%	1978	2000	657200	1.1%
AXISBANK	1100	3262500	3.0%	1068	1060	1415625	-0.8%	LT	3700	1075025	0.6%	3677	3700	413175	0.6%
BAJAJ-AUTO	9000	189300	9.6%	8214	8000	108900	-2.6%	M&M	3400	1929600	4.1%	3265	3100	1336200	-5.1%
BAJAJFINSV	2000	1032500	3.9%	1925	1900	601000	-1.3%	MARUTI	13000	392650	0.5%	12936	12500	153450	-3.4%
BAJFINANCE	900	8838000	4.5%	861	900	3397500	4.5%	NESTLEIND	1150	865000	5.6%	1089	1050	359500	-3.6%
BEL	400	10297050	3.9%	385	390	4266450	1.3%	NTPC	340	16872000	0.2%	339	340	3733500	0.2%
BHARTIARTL	2000	3210525	6.7%	1874	1860	1147125	-0.7%	ONGC	235	15117750	-0.8%	237	235	4835250	-0.8%
CIPLA	1600	807750	2.3%	1564	1500	431625	-4.1%	POWERGRID	300	6841900	3.9%	289	290	1476300	0.5%
COALINDIA	400	6046650	4.0%	384	450	2243700	17.1%	RELIANCE	1400	13087000	1.9%	1374	1400	5472000	1.9%
DRREDDY	1300	1597500	3.1%	1260	1200	903125	-4.8%	SBILIFE	1900	1207125	3.2%	1841	1800	215250	-2.2%
EICHERMOT	5800	210525	0.6%	5764	5800	181650	0.6%	SBIN	830	9081750	0.4%	827	800	7017000	-3.2%
ETERNAL	320	11089525	0.5%	318	300	7085850	-5.8%	SHRIRAMFIN	700	1638450	13.6%	616	600	918225	-2.7%
GRASIM	2800	239000	1.3%	2765	2700	402500	-2.3%	SUNPHARMA	1740	856450	6.0%	1641	1500	1060850	-8.6%
HCLTECH	1500	1216250	0.7%	1490	1500	838950	0.7%	TATACONSUM	1100	872850	4.6%	1051	1000	383350	-4.9%
HDFCBANK	2000	2756600	0.4%	1991	2000	2546500	0.4%	TATAMOTORS	700	6819200	5.3%	665	600	2644000	-9.7%
HDFCLIFE	800	1422300	1.4%	789	730	1064800	-7.4%	TATASTEEL	165	21774500	6.2%	155	155	7568000	-0.2%
HEROMOTOCO	4600	583200	-2.3%	4708	4600	339750	-2.3%	TCS	3100	2910600	2.6%	3022	3000	1206800	-0.7%
HINDALCO	700	2753800	0.7%	695	660	1787800	-5.1%	TECHM	1600	951000	7.6%	1487	1500	636000	0.9%
HINDUNILVR	2600	2385900	4.8%	2481	2400	629100	-3.2%	TITAN	3500	519225	0.3%	3489	3400	390600	-2.6%
ICICIBANK	1500	3983000	5.1%	1427	1400	1874600	-1.9%	TRENT	5500	549800	2.4%	5371	5000	290800	-6.9%
INDUSINDBK	900	2716000	16.9%	770	800	1544200	3.9%	ULTRACEMCO	13000	102100	5.5%	12317	12000	45950	-2.6%
INFY	1600	3480400	10.5%	1448	1400	1791600	-3.3%	WIPRO	250	6954000	1.3%	247	240	3990000	-2.8%

If distance to call strike from current market price < distance to put strike from current market price, then the %Away for the call strike will be colored green

If distance to put strike from current market price < distance to call strike from current market price, then the %Away for the put strike will be colored red

If distance to call strike from current market price = distance to put strike from current market price, then the %Away columns will be uncolored

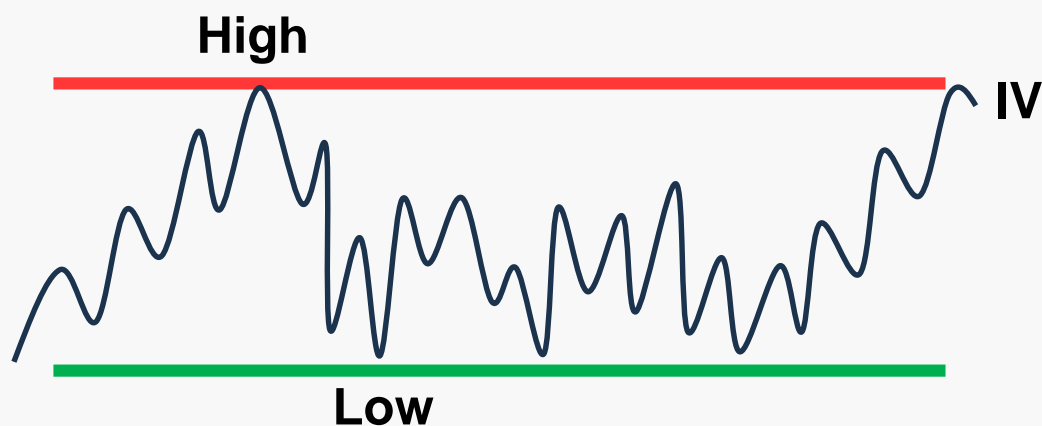
- Open interest **goes up** when **both** the buyer and the seller are **opening a new position**
- Open interest remains the **same** when one party is **opening a new position** and the other is **liquidating an existing position**
- Open interest **falls** when both the buyer and the seller are **liquidating existing positions**
- **Long build up:** Prices increase with a rise in open interest and is considered **bullish**
- **Long liquidation:** Existing longs liquidate their positions and open interest also falls; **moderately bearish**
- **Short build up:** Prices drop with a rise in open interest, and this is considered **bearish**
- **Short covering:** Existing shorts cover their positions, and open interest drop; this is **moderately bullish**
- PCR goes up when 1) both put and call open interest go up, but puts rise faster, or 2) both put and call open interest go down, but calls fall faster or, 3) when puts go up and calls go down
- Generally, a **rising PCR is bearish**, but when it reaches an extremely **high** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bullish**
- PCR goes down when 1) both put and call open interest go up, but calls rise faster, or 2) both put and call open interest go down, but puts fall faster or, 3) when puts go down and calls go up
- Typically, a **falling PCR is bullish**, but when it reaches an extremely **low** reading, it means people are likely to take contrarian bets, i.e., they are likely to turn **bearish**

*\*ATM IV is the midpoint of the IV for the ATM call and put respectively*

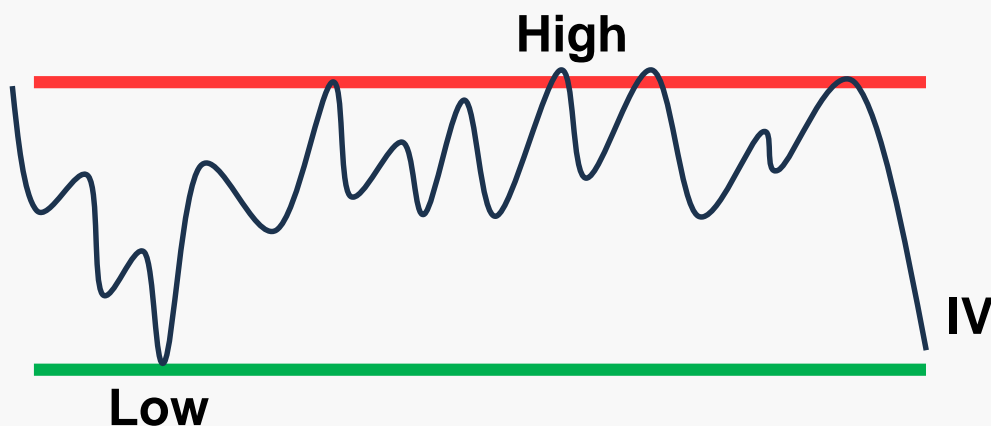


- **Volume:** Number of contracts traded for the day. If A bought 10 calls & B sold 10 calls, the volume for the day is 10 contracts
- **Open Interest:** The number of derivatives contracts that are open (have not been closed out). If A bought 10 calls, B bought another 10 calls and C sold 20 calls, then the open interest for the day is 20 contracts
- **Total open interest:** Total of all open positions for all available expirations. It is the sum of all outstanding long positions OR short positions. This is because the total number of long positions must equal the total number of short positions
- **Premium:** When the front-month futures are more expensive than the cash market price. For instance, if Nifty futures (first month contract) are at 25,500 when the cash Nifty is at 25,450, the premium is 50 points
- **Discount:** When the front-month futures are cheaper than the cash market price. For instance, if Tata Steel futures (first month contract) are at 160 when the stock is trading at 162 in the cash market, the discount is 2 points
- **At-the-Money (ATM):** When the strike price of an option is the same as the spot price, the option is called an ATM option
- **Implied Volatility (IV):** Measure of how much a stock is expected to move in the future (in either direction)
- **Put-Call Ratio (PCR):** Ratio of total number of outstanding puts to total number of calls outstanding. If this ratio is more (less) than one, it means more puts (calls) are open relative to calls (puts)
- **Derivatives market participants:** Foreign Institutional Investors (FIIs), Domestic Institutional Investors (DII)s, proprietary traders and Retail investors
- **Derivatives Instruments:** Index options, index futures, stock options, stock futures
- **Expirations covered:** Index options (weekly, monthly), stock options, stock futures and index futures (monthly)
- For pages 7 to 11, “Last px” refers to the closing price of the cash market ticker
- **Source(s):** [www.nseindia.com](http://www.nseindia.com), Bloomberg, MyFnO

- **Strike concentration:** Visual representation of how many calls and puts are outstanding at each strike in the vicinity of the current underlying price. The strike with the highest call open interest is considered as resistance, while the put strike with the highest number of outstanding positions is considered as support
- **Shifting concentration:** Strikes with highest call and put concentration are dynamic in nature and keep changing as per movements in the markets
- **Implied Volatility Rank (IVR):** Measure of how expensive or cheap the IV of an ATM option is, relative to its 12-month history. The reading oscillates between 0 and 100



Assume the wavy line is IV over the last one year. Notice that today's IV is close to the highest high seen in the last one year. This means that IV for this option is expensive compared to where it's been in the last 12 months.



In this chart, notice that today's IV is close to the lowest low seen in the last 12 months. This means that IV for this option is cheap today compared to where it has traded over the last one year.

- **Implied Volatility Percentile (IVP):** Measures the number of days IV has been below the current IV in the last 252 trading days. The reading moves between 0 and 100.



In the chart to the left, one can see that the bulk of the time the IV has been below its current level. In this case, the IVP will be close to 100. An IVP of 100 means that 100% of the time IV has been below its current reading in the last one year.



Notice that IV has mostly traded at the high end of its one-year range, and there have been very few values below the current IV. In such a scenario, the IVP is going to be close to 0. An IVP of say, 5, means that IV has been below the current IV only 5% of the time in the last 252 trading sessions.

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Compliance Officer Details: Name – **Mr. Rajiv Kejriwal**, Tel No. – 022-68555574, Email id – [compliance.officer@axisdirect.in](mailto:compliance.officer@axisdirect.in);

Registered Office Address – Axis Securities Limited, Unit No.002, Building- A, Agastya Corporate Park, Piramal Realty, Kamani Junction, Kurla (W), Mumbai – 400070.

Administrative office address: Aurum Q Parc, Q2 Building, Unit No. 1001, 10th Floor, Level – 6, Plot No. 4/1 TTC, Thane – Belapur Road, Ghansoli, Navi Mumbai, Pin Code – 400710.

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Sr. No	Name	Designation	E-mail
1	Rajesh Palviya	SVP Research (Head Technical & Derivatives)	rajesh.palviya@axissecurities.in
2	Hemang Gor	Derivative Analyst	hemang.gor@axissecurities.in
3	Rahil Vora	Derivative Analyst	rahil.vora@axissecurities.in